



ATTORNEY DOCKET NO. C0279/7017

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Wagner et al.
Serial No.: 08/377,798
Filed: January 24, 1995
For: METHOD FOR TREATING AND PREVENTING ATHEROSCLEROSIS
Examiner: Krikorian, J.
Art Unit: 1806

RESPONSE TO RESTRICTION REQUIREMENT

Hon. Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Sir:

In response to the Restriction Requirement of October 13, 1995, Applicants hereby elect for prosecution in the above-identified application Species C drawn to claims 19 and 20 as identified by the Examiner. This election is made with traverse. Applicants understand that generic claims 1-12 and 25-28 will be prosecuted along with the Species C claims 19 and 20.

In electing Species C, Applicants urge that claims 13, 14, 17, 18, 21, 22, 23 and 24 also be examined, since they also read on Species C in that they can include a carbohydrate. A sulfatide is a carbohydrate (claim 23). A ligand could encompass carbohydrates (claim 13). See, e.g., the specification at page

6, lines 7-17 ("P-selectin ligands include carbohydrate groups, e.g.,"). Analogs could encompass carbohydrates (claim 24). See, e.g., the specification at page 11, lines 10-12 ("Ligand analogs or mimetics include substances which resemble in shape and/or charge distribution the carbohydrate ligand for P-selectin."). Glycoproteins contain a carbohydrate moiety (claims 21 and 22). See, e.g., the specification at page 6, lines 17-19 ("P-selectin ligands are also meant to include glycoproteins which contain a carbohydrate structure."). Since it is these carbohydrates which can be the functional moiety of the glycoprotein, it would make most sense to also include the claims which cover such molecules in the examination of claims drawn to carbohydrate claims (Species C). And, inhibitory proteins, as defined in the specification, can contain a carbohydrate moiety which is the functional element that is recognized by P-selectin (claims 14, 17 and 18). See, e.g., the specification at page 9, lines 10-20 ("Inhibitory proteins include ... carrier proteins expressing a carbohydrate moiety recognized by P-selectin.").

While Applicants have elected Species C for prosecution, urging that the above-noted additional claims should be included in Species C, Applicants believe that in fact no species requirement at all should be made here. According to the MPEP §806.04(f): "Claims to be restricted to different species must be mutually exclusive." (Emphasis added). In the instant application, however, the claims corresponding to the different Species A-E are not mutually exclusive. Moreover, there is a disclosure of the relationships between the species in the specification of the application, as evidenced below. See MPEP §808.01(a).

Species E, which covers analogs of P-selectin or analogs of ligands of P-selectin, can be, for example, glycoproteins, proteins or peptides from Species A, or carbohydrates from Species C, or sulfatides from Species D. See, e.g., specification at page 6, lines 7-32 ("P-selectin ligands include carbohydrate groups, e.g., sialyl-Lewis x P-selectin ligands are also meant to include glycoproteins which contain a carbohydrate structure Analogs of the above ligands ...

e.g., derivatives of the sialyl-Lewis x compounds ... are also meant to be included as P-selectin ligands."); page 10, lines 16-29 ("Inhibitory carbohydrates include oligosaccharides containing sialyl-Lewis a ... or related structures or analogs); page 11, lines 4-12 ("P-selectin analogs or mimetics are substances which resemble in shape and/or charge distribution P-selectin Ligand analogs or mimetics include substances which resemble in shape and/or charge distribution the carbohydrate ligand for P-selectin.); claim 20 ("wherein said inhibitory carbohydrate is selected from the group consisting of sialyl-Lewis x and its analog).

Species B, which covers antibodies to P-selectin or to ligands of P-selectin, are proteins from Species A. See, e.g., specification at page 9, lines 10-19 ("Inhibitory proteins include, e.g., anti-P-selectin antibodies; anti-P-selectin ligand antibodies").

Species C, which covers carbohydrates can be, as discussed above, a sulfatide (Species D), a ligand (Species A), an analog (Species E), the functional moiety of a glycoprotein (Species A),

or the functional moiety of a carrier protein expressing a carbohydrate moiety (Species A).

Thus, claims 13, 14, 17, 18, 21 and 22 (Species A), claims 14-16 (Species B), claims 19 and 20 (Species C), claim 23 (Species D) and claim 24 (Species E), should not, according to the MPEP §806.04(f), be restricted to different species at all because they are not mutually exclusive. Therefore, all of the claims should be examined together.

It is noted that while the Examiner has designated Species A, B and E as "... an inhibitor of P-selectin," Applicants assume that the Examiner meant "a ligand of P-selectin."

Respectfully submitted,


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